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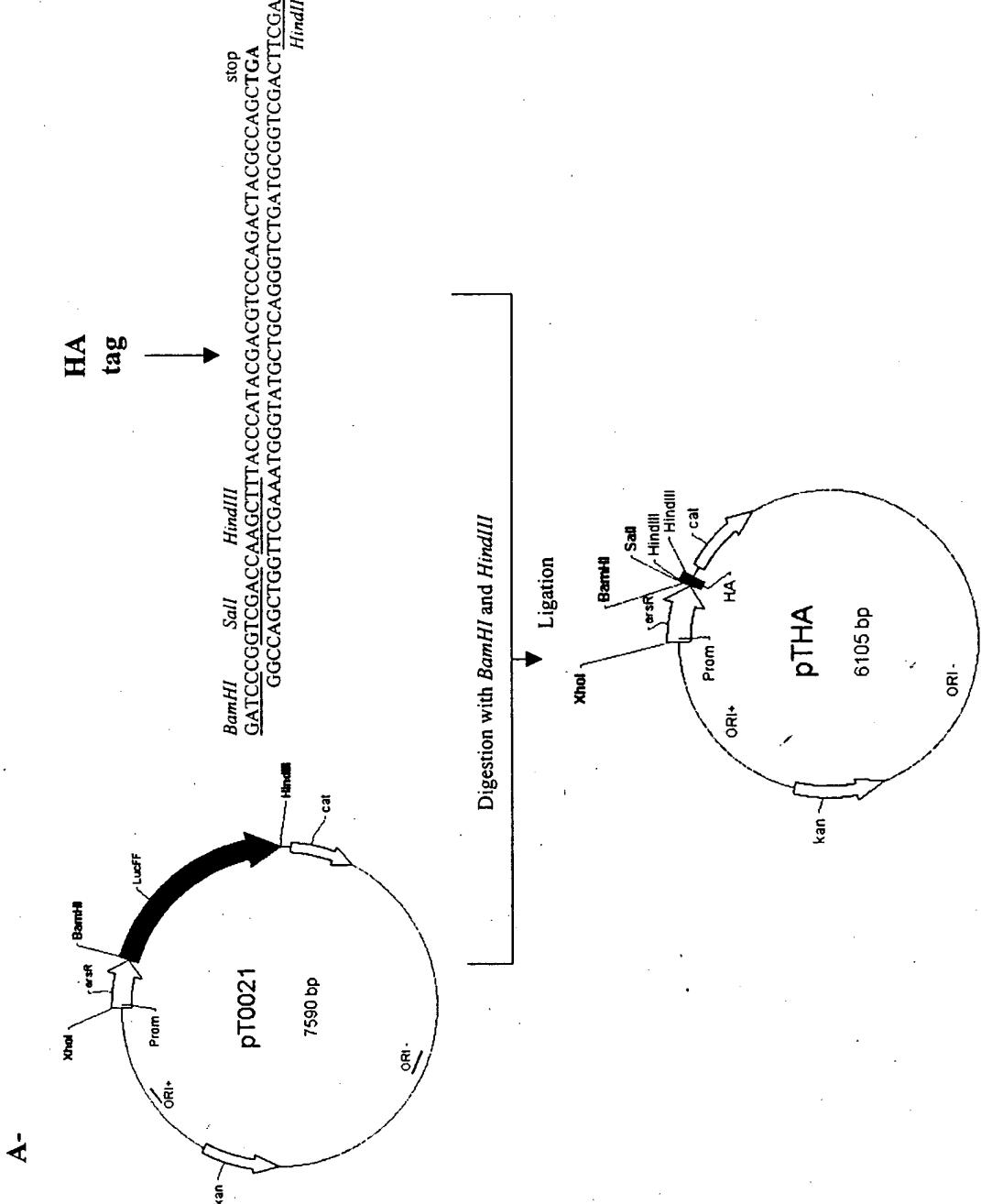
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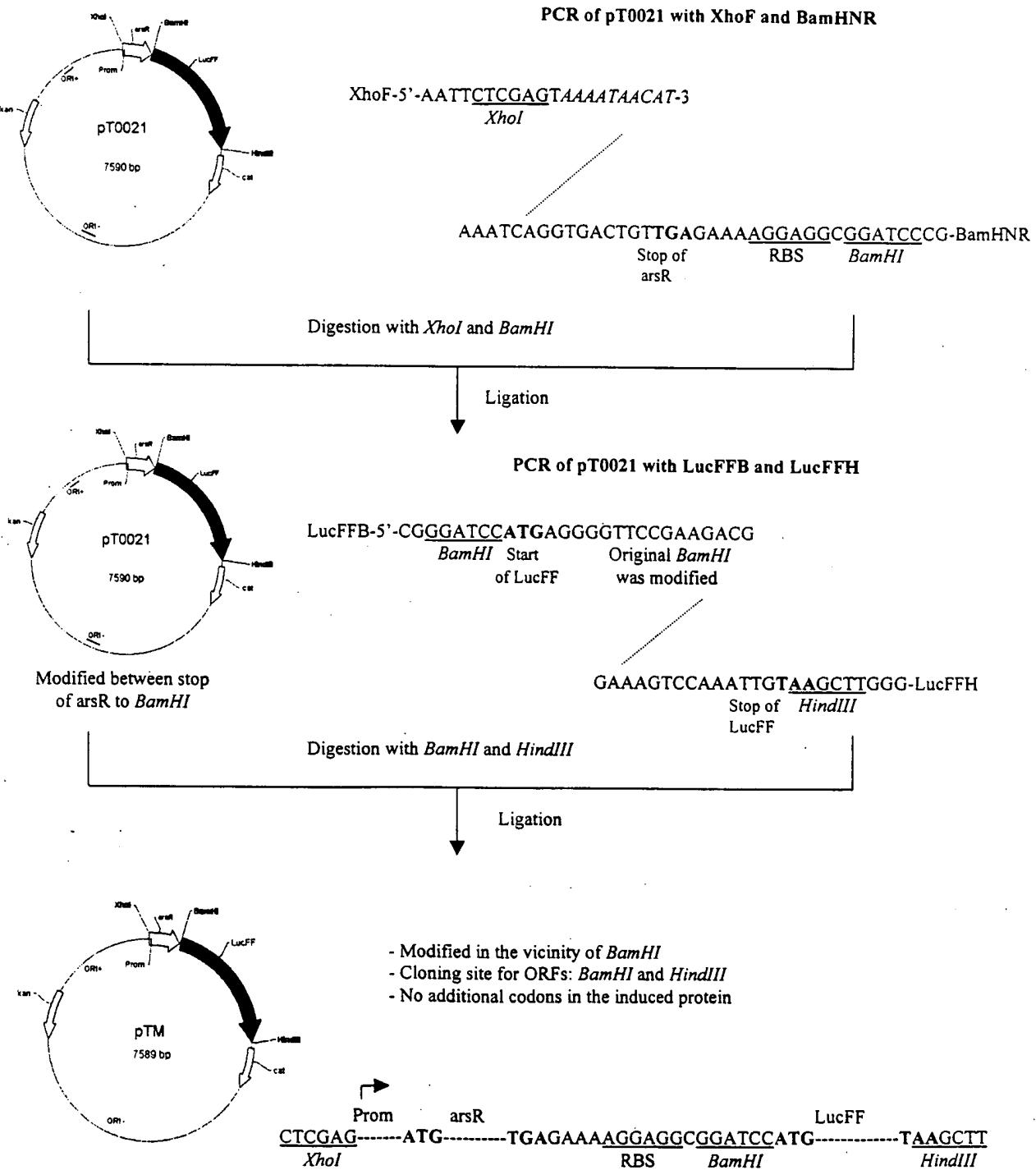
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FIGURE 1A



B-

FIGURE 1B



C-

FIGURE 1C

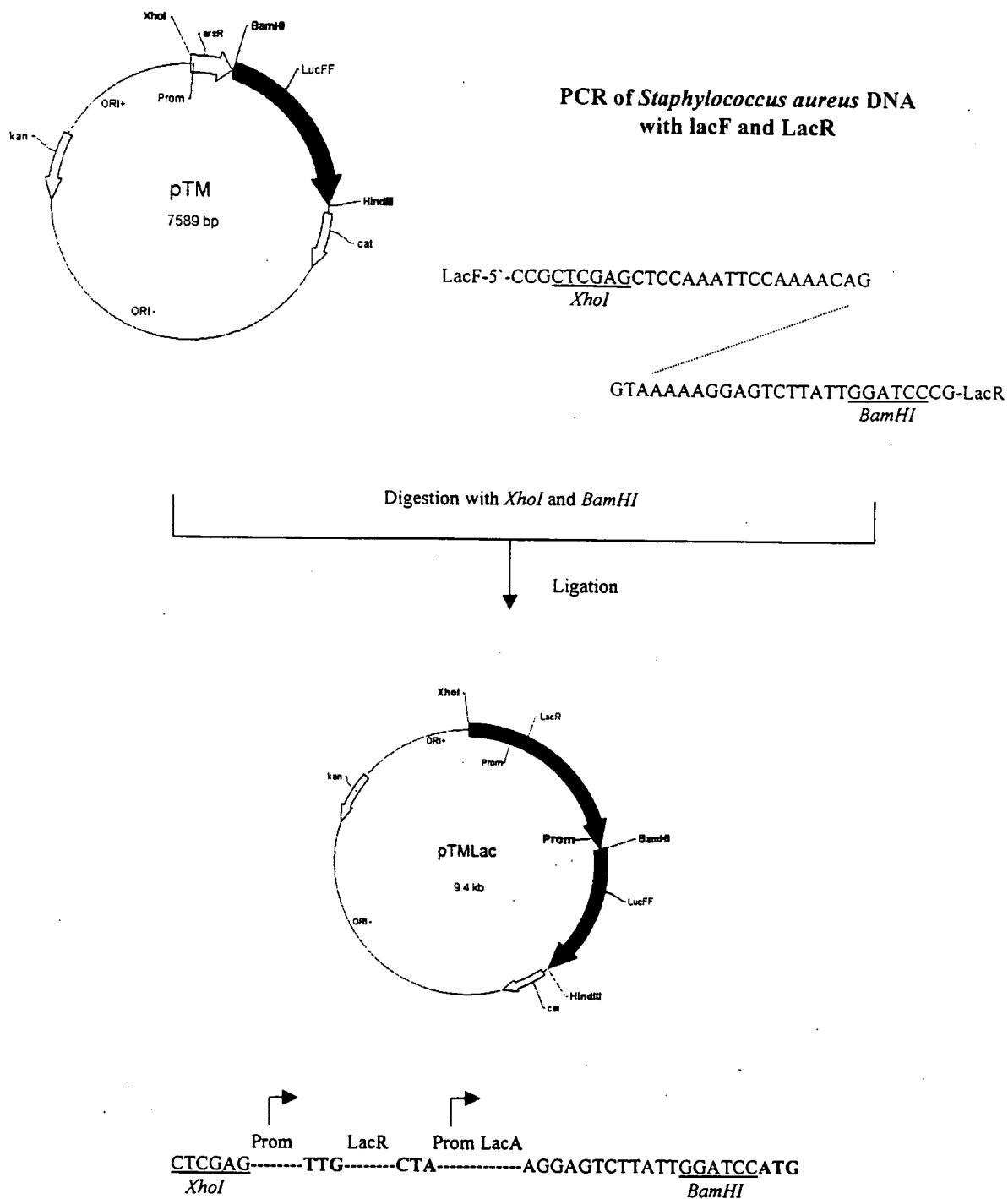
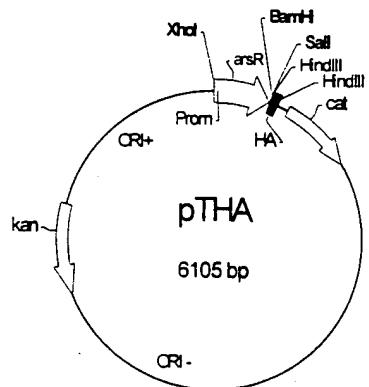
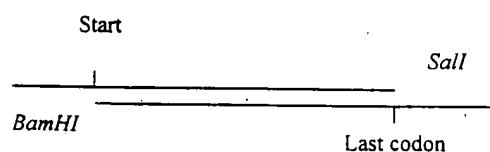


FIGURE 2A

A-



PCR of phage DNA with
ORF specific primers



Digestion with *BamHI* and *SalI*

Ligation

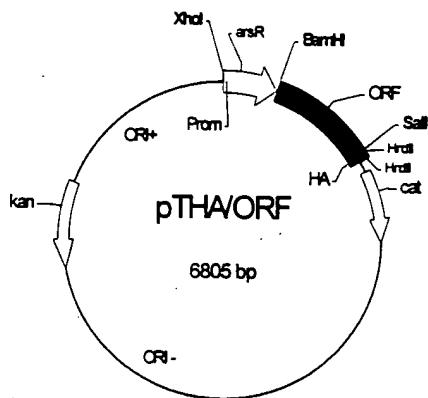
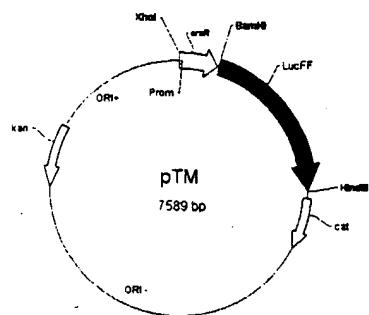
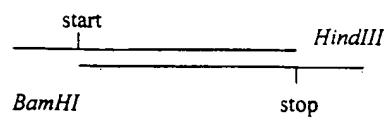


FIGURE 2B

B-



PCR of phage DNA with ORF specific primers



Digestion with *BamHI* and *HindIII*

Ligation

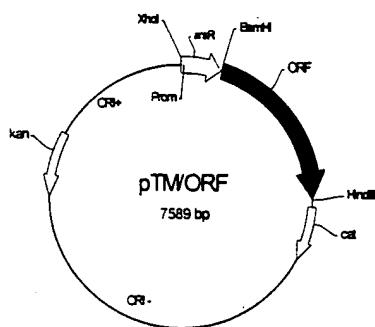
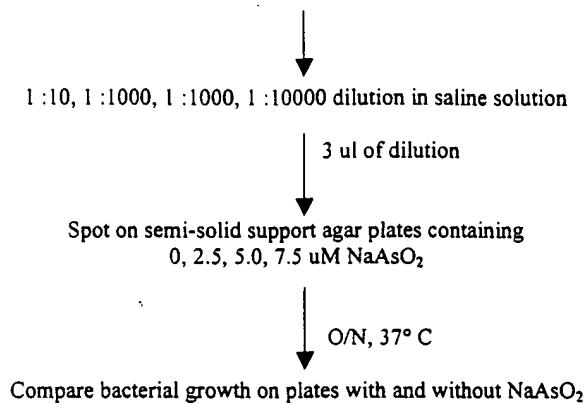


FIGURE 3

A) Functional assay on semi-solid support medium

O/N culture inoculated from frozen stock
of phage ORF *Staphylococcus aureus* RN4220 transformants



B) Functional assay in liquid medium

O/N culture inoculated from frozen stock
of phage ORF *Staphylococcus aureus* RN4220 transformants

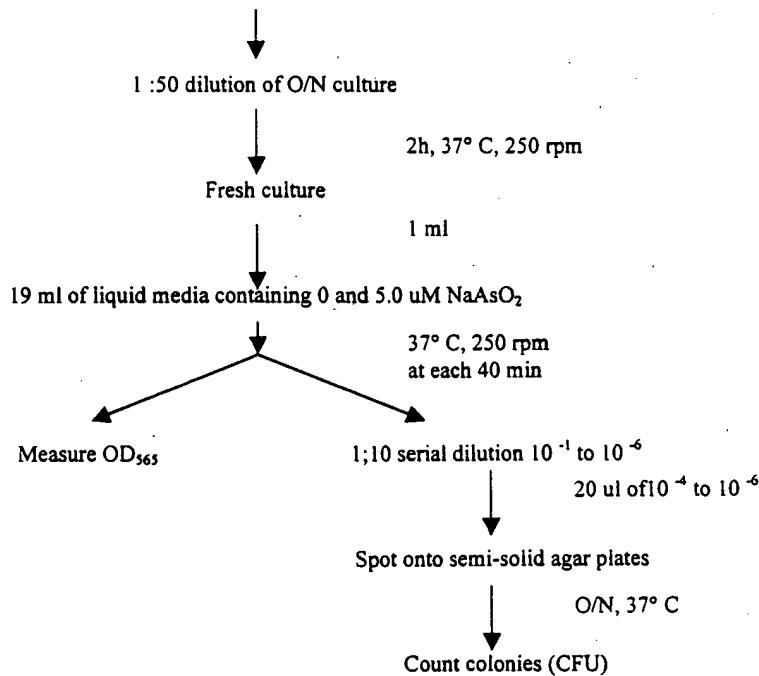


FIGURE 4A

A-

44AHJD ORFs tested for functional analysis

UID	POS
44AHJDORF001	12627..10342
44AHJDORF002	3789..5732
44AHJDORF003	6626..8389
44AHJDORF004	8764..10227
44AHJDORF005	13890..12643
44AHJDORF006	803..2029
44AHJDORF007	2044..3027
44AHJDORF008	3020..3775
44AHJDORF009	5744..6496
44AHJDORF010	14420..13938
44AHJDORF011	15593..15225
44AHJDORF012	8391..8813
44AHJDORF013	14996..14586
44AHJDORF019	9836..9630
44AHJDORF023	6494..6315
44AHJDORF025	15175..14999
44AHJDORF027	12916..13080
44AHJDORF028	9235..9071
44AHJDORF035	13957..13811
44AHJDORF036	10165..10019
44AHJDORF039	1743..1883
44AHJDORF040	9740..9877
44AHJDORF044	12917..12783
44AHJDORF046	4891..5019
44AHJDORF048	15340..15212
44AHJDORF049	5784..5909
44AHJDORF053	3348..3467
44AHJDORF113	199..600
44AHJDORF114	16172..15870
44AHJDORF121	16362..16165
44AHJDORF123	614..796

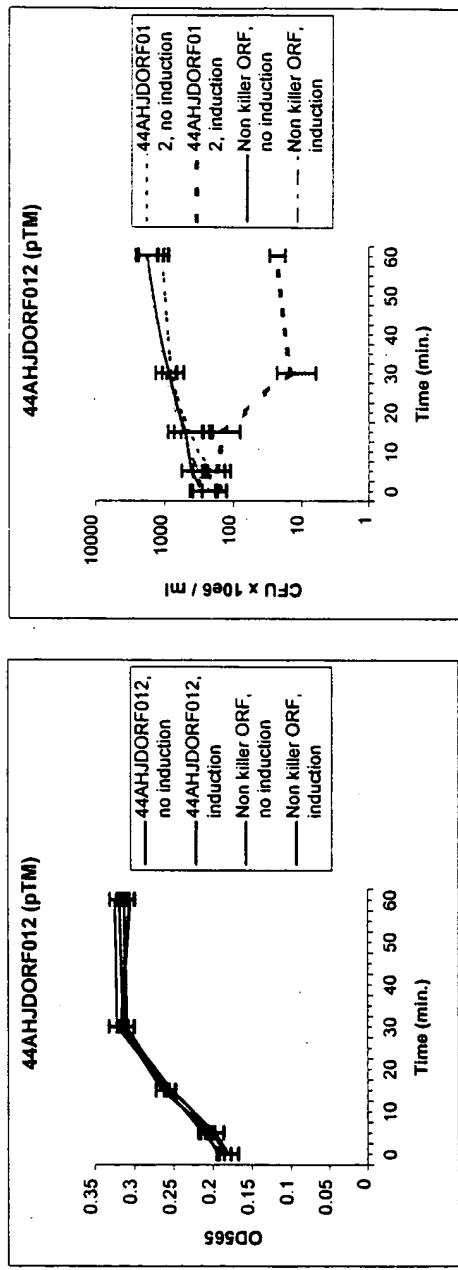
FIGURE 4B

B-

ORF ID	<i>Staphylococcus aureus</i> transformants	Semi-solid support media	
		Without induction	With induction (5 μ M sodium arsenite)
44AHJDORF12	Clone1		
	Clone2		
	Clone3		
44AHJDORF25	Clone1		
	Clone2		
	Clone3		
Control 77ORF30	Clone1		

A-

FIGURE 5A



**Fig
.5B**

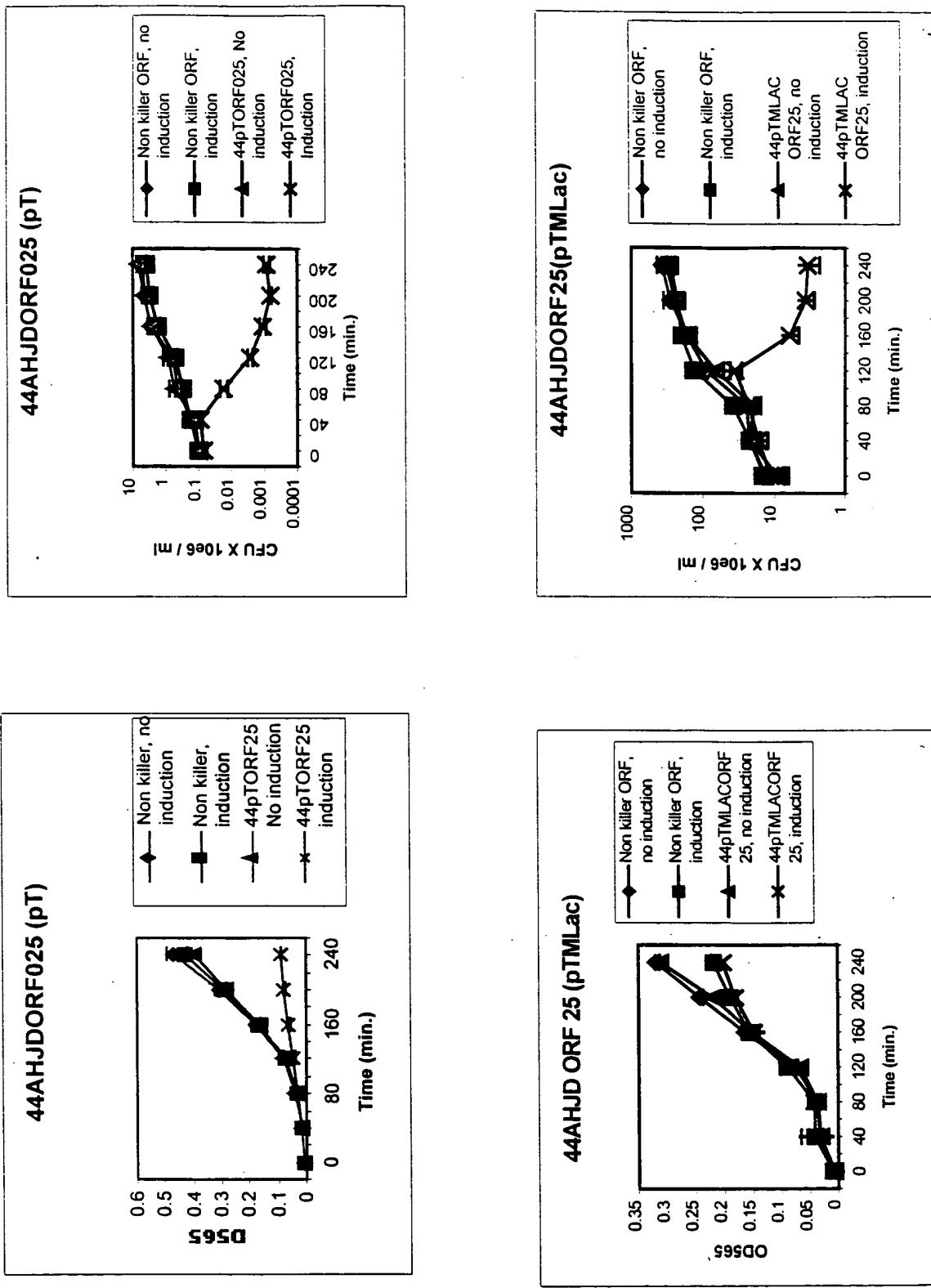


FIGURE 6

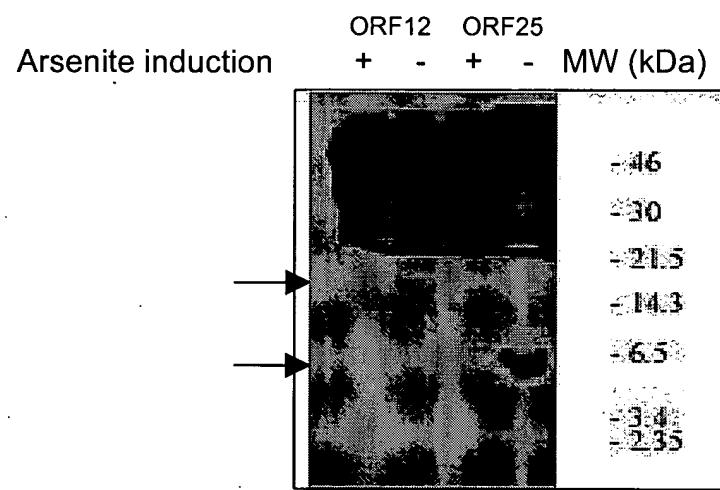
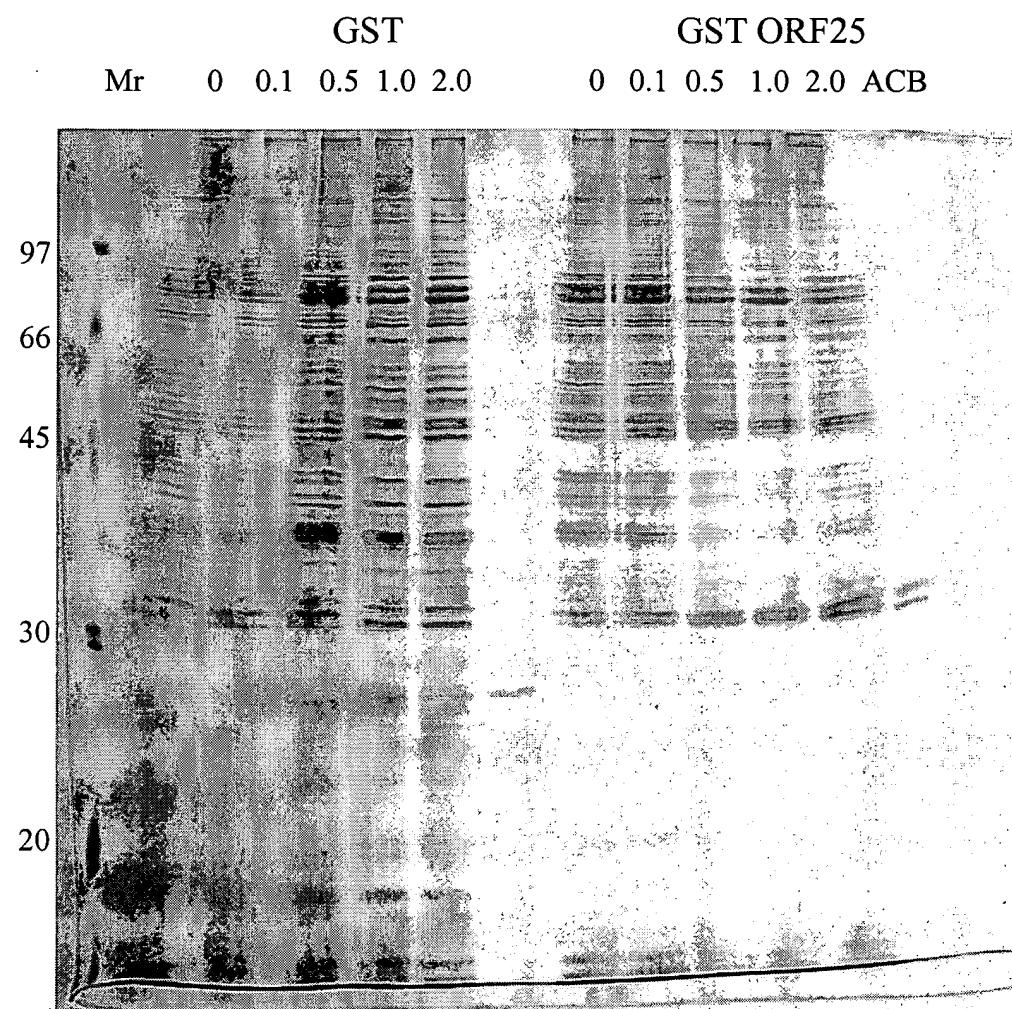


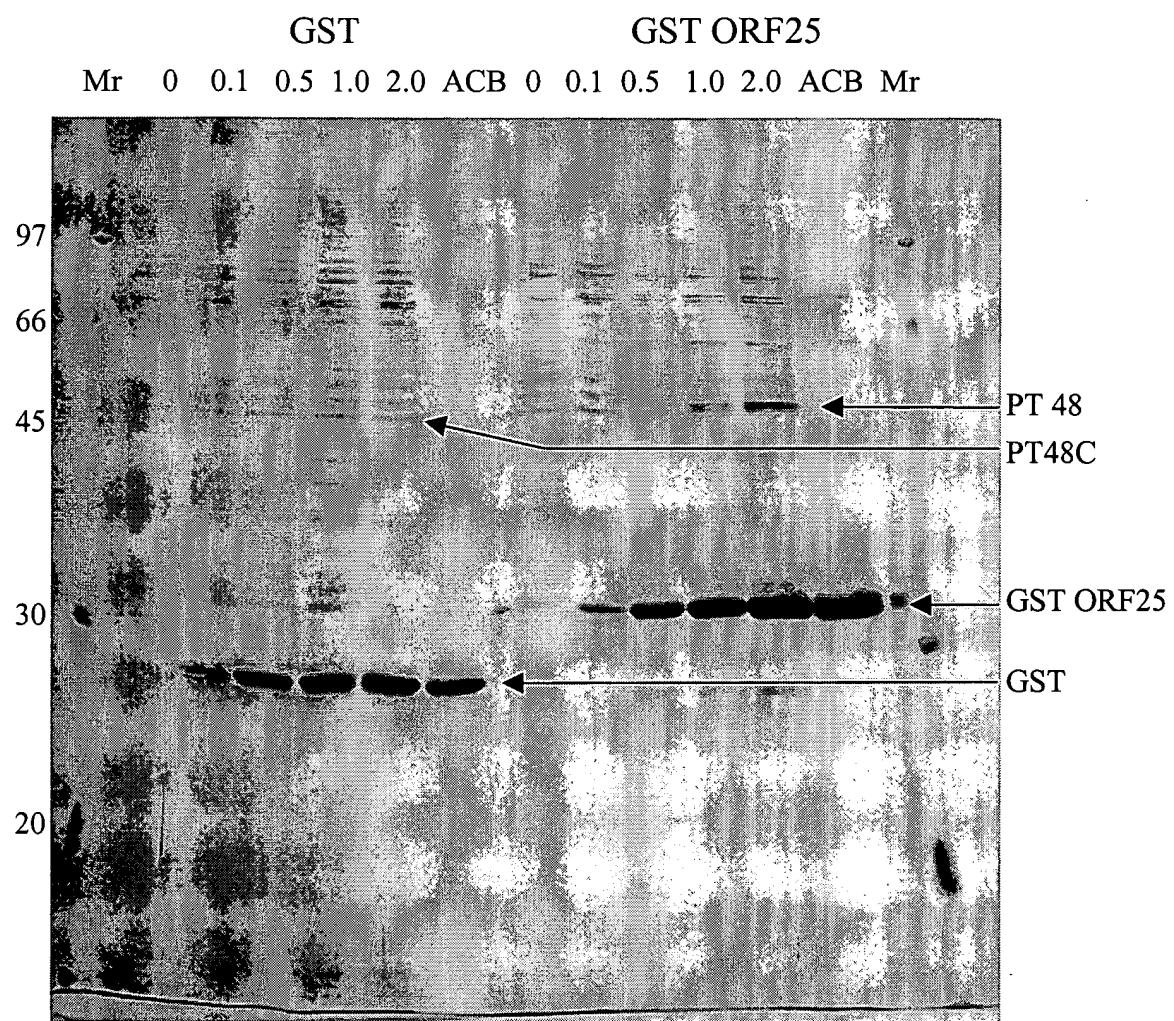
FIGURE 7A



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FIGURE 7B

2007-08-26 BY ZHENG



700 1000 1500 2000 2500

FIGURE 8

Tryptic peptide mass spectrum of 48 kDa interacting protein
(from Figure 1B)

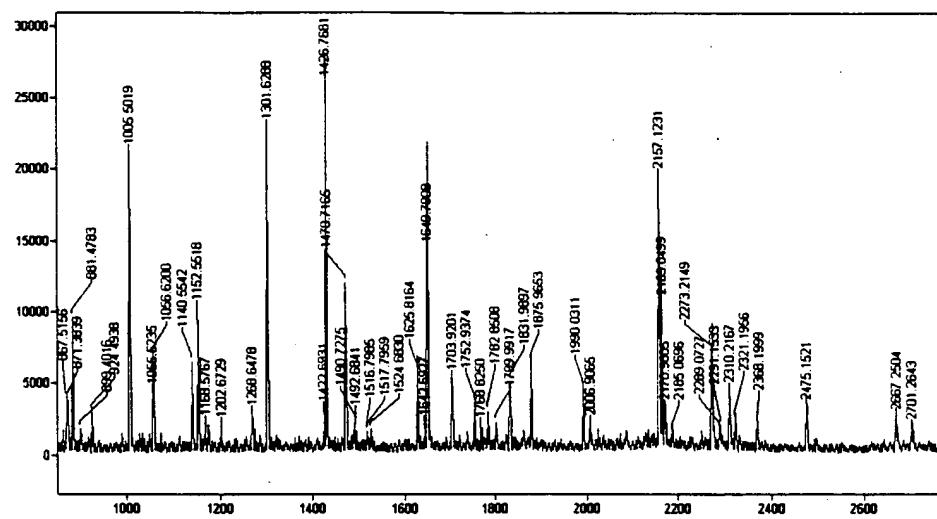


FIGURE 9

Identification of PT48 as DNA-directed DNA polymerase III beta.

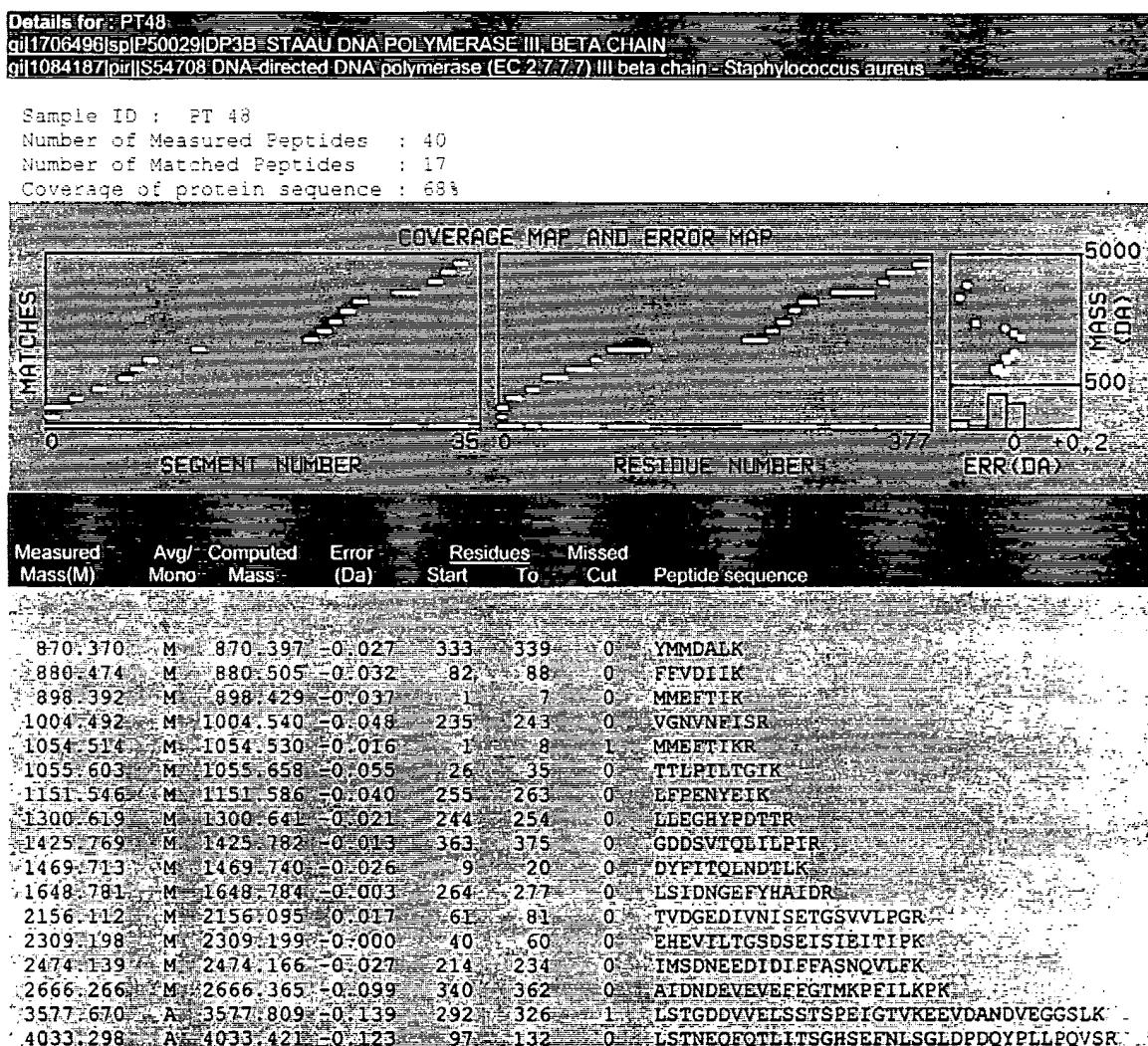


FIGURE 10

SEQ ID NO : 1 *Staphylococcus aureus* DnaN nucleotide sequence

ATGATGGAATTCACTATTAAAAGAGATTATTTATTACACAATTAAATGACACATTA
GCTATTCACCAAGAACAACTACCTATTTAACTGGTATCAAATCGATGCGAAAGAA
CATGAAGTTATATTAACTGGTCAGACTGAAATTCAATAGAAATCACTATTCTAAA
ACTGTAGATGGCGAAGATATTGCAATATTCAAGAACAGGCTCAGTAGTACTTCCTGGA
CGATTCTTGTGATATTATAAAAAATTACCTGGTAAAGATGTTAAATTATCTACAAAT
GAACAATTCCAGACATTAATTACATCAGTCATTCTGAATTAAAGTGGCTTAGAT
CCAGATCAATATCCTTATTACCTCAAGTTCTAGAGATGACGCAATTCAATTGTCGGTA
AAAGTGCCTAAAAACGTGATTGACAAACAAATTTCAGTGACTGTCCACCTCAGAAACACGC
CCAGTACTAACTGGTGTGAACTGGCTTATACAAGAAAATGAATTAATATGCACAGCGACT
GACTCACACCGCTTGGCTGTAAGAAAGTGCAGTTAGAAGATGTTCTGAAAACAAAAAT
GTCATCATTCAGGTAAAGGCTTAGCTGAATTAAATAAAATTATGTCGACAATGAAGAA
GACATTGATATCTCTTGCTTCAACCAAGTTTATTTAAAGTGGAAATGTGAACCTT
ATTTCGATTATTAGAAGGACATTACCTGATACAAACACGTTATTCCCTGAAAACAT
GAAATTAAATAAGTATAGACAATGGGAGTTTATCATGCGATTGATCGTGCCTTTA
TTAGCGCGTGAAGGGTGTAAACGTTATTAAATAAGTACAGGTGATGACGTTGAA
TTGTCTCTACATCACCAGAAATTGGTACTGTAAAAGAAGATTGATGCAAACGATGTT
GAAGGGTGTAGCCTGAAAATTCACTCTAAATATGATGGATGCTTAAAGCA
ATCGATAATGATGAGGTTGAAGTTGAATTCTCGGTACAATGAAACATTATTCTAA
CCAAAAGGTGACGACTCGGTACCGCAATTAAATTACCAATCAGAACTTACTAA

SEQ ID NO : 2 *Staphylococcus aureus* DnaN amino acid sequence

>gi|1084187|pir||S54708 DNA-directed DNA polymerase (EC 2.7.7.7) III beta chain -
Staphylococcus aureus

MMEFTIKRDYFITQLNDTLKAISPRTTLPILTGIKIDAKEHEVILGS
SETGSVVLPGRRFFVDI IKKLPGKDVKLSTNEQFQTLITSGHSEFNLS
GKVLKNVIAQTNFAVSTSETRPVLTGVNWLIQENELICTATDSHRLA
VRLKQLEDVSENKNVIIPGKALAE
LNKIMSDNEEDIDIFFASNQVLFKVGNVNFI
SRLLLEGHYPDTTRLFPENYEIKLSIDNGEFYHAIDRASL
LAREGGNNVIKLSTGDDVVELSSTSPEIGTVKEEV
DANDVEGGSLKISFNSKYMMDA
LKAIIDNDEVEVEFG
FGTMKPFI
LKPKGD
DSVTQL
LILP
RTY